

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Geophysical Survey Systems, Inc.,	)	ET Docket No. 19-155
Request for Waiver of Part 15 of the	)	
Commission's Rules to Market and	)	
Ultra-Wideband Evaluation Kit	)	

**COMMENTS OF AVIATION SPECTRUM RESOURCES, INC.**

Aviation Spectrum Resources, Inc. ("ASRI") hereby submits comments on the Geophysical Survey Systems, Inc. ("GSSI") Request for Waiver ("Request") filed with the Commission on April 11, 2019<sup>1</sup>. In the Request, GSSI seeks a waiver from specified Ultra-Wide Band ("UWB") technical and eligibility rules of Part 15 to operate a Ground Penetrating Radar ("GPR") in support of autonomous road vehicle navigation. In response ASRI requests that before the Commission approves the GSSI Request, a proper assessment of the system's affect on aviation VHF safety services should be conducted by aviation industry experts in conjunction with the Federal Aviation Administration ("FAA"). This would ensure the protection of aviation safety communications supporting national Air Traffic Control ("ATC") and other aviation safety services within the 117.975 – 137 MHz aviation VHF band.

ASRI is the communications company of the US commercial aviation industry and is owned by the airlines and other airspace users. As sponsor of the Aeronautical Frequency Committee ("AFC"), ASRI brings together expertise and opinions from across the aviation

---

<sup>1</sup> Geophysical Survey Systems, Inc. Request for Waiver, ET Docket No. 19-155 (filed Apr. 11, 2019) ("Request"); see Public Notice, Office of Engineering and Technology Seeks Comment on Geophysical Survey Systems, Inc. Request for Waiver of Certain Part 15 Ultra-Wideband Rules, DA 19-491 (rel. May 30, 2019)

sector to promote the safe and effective operation of commercial aviation radio communications and navigation systems in use within the US.<sup>2</sup>

The 117.975 - 137 MHz Aeronautical Mobile (Route) Service (“AM(R)S”) allocation in the US is used by both the FAA, and commercial aviation service providers, to transmit ATC and other safety and regularity of flight messages. These VHF services form the foundation of domestic air management and are the primary means of relaying messages for aircraft control nationwide. Therefore, the aviation industry approaches applications that may affect these aviation VHF safety services with significant caution.

In reviewing the Request, ASRI has similar questions as presented by the GPS Innovation Alliance (“GPSIA”) in its comments, seeking ‘*A more thorough description of the proposed equipment and operations...*’.<sup>3</sup> Therefore, ASRI requests that any Commission action on the Request be put on hold until the aviation community can engage directly with GSSI, to better understand the technical and operational parameters of the GSSI system and how aviation systems will respond to such signals. This will enable a definitive assessment on any potential effects to aviation VHF services.

Safety assurance is a core principle that the aviation industry applies to all aspects of air travel, including prevention of harmful interference to the critical VHF spectrum infrastructure

---

<sup>2</sup> AFC membership includes: Airlines for America, Alaska Airlines, Air Line Pilots Association, American Airlines, Aircraft Operators and Pilots Association, ASRI, Boeing Corporation, Bristow Helicopters, Chevron, Collins Aerospace, Delta Airlines, Era Helicopters, Federal Aviation Administration, Federal Express, Frontier Airlines, Harris Corporation, Helicopter Association International, Helicopter Safety Advisory Conference, International Air Transport Association, JetBlue Airways, National Air Transportation Association, PHI, Inc., Societe Internationale de Telecommunications Aeronautique, Southwest Airlines, United Airlines, and United Parcel Service.

<sup>3</sup> See Comments by GPSIA on Geophysical Survey Systems, Inc. Request for Waiver of Certain Part 15 Ultra-Wideband (UWB) Rules, ET Docket No. 19-155 (filed Jun 19, 2019)

needed for ATC and other aviation safety messages. A short pause to assess and verify the potential impact on aviation VHF safety services from the proposed GSSI system is in everyone's best interest.

Respectfully Submitted,

/s/ Andrew Roy  
Andrew C. Roy, Director of Engineering  
Aviation Spectrum Resources, Inc.  
180 Admiral Cochrane Drive, Suite 300  
Annapolis, MD, 21401  
443-951-0340  
[ACR@ASRI.aero](mailto:ACR@ASRI.aero)

Dated: July 5, 2019